## Creating a Curved Barrel Ceiling

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The information in this article applies to:



## QUESTION

I would like to create a barrel ceiling on the inside of my structure. How can I accomplish this?



## ANSWER

You can easily create a custom curved ceiling for a structure using a manually drawn ceiling plane.

## To create a curved or barrel ceiling

- 1. Using the **Select Objects** button, click in an empty space of the room in which you would like to create a barrel ceiling and click the **Open Object** ceit button.
- 2. On the **STRUCTURE** panel of the **Room Specification** dialog that opens, uncheck the box beside the **Ceiling Over This Room**, then click **OK**.

| Room Specification               |   |            |                                |  |  |
|----------------------------------|---|------------|--------------------------------|--|--|
| General                          | Absolute Elevations   |            |                                |  |  |
| Structure                        | Floor Above:  |            |                                |  |  |
| Deck                             |   | 40         |                                |  |  |
| Deck Support                     | Ceiling:  | 109 1/8"   |                                |  |  |
| Moldings                         | Floor:  | 0" 🖖       |                                |  |  |
| Wall Covering                    | 51 D I  |            |                                |  |  |
| Fill Style                       | Floor Below:  |            |                                |  |  |
| Materials                        | Relative Heights  |            |                                |  |  |
| Components<br>Object Information | the second |            |                                |  |  |
| Schedule                         | Rough Ceiling:  | 109 1/8"   |                                |  |  |
| Schedule                         | Finished Ceiling:   | 107 5/8" 🖞 |                                |  |  |
|                                  | SWT To Ceiling:   | 109 1/8" 🖞 |                                |  |  |
|                                  | Ceiling Below:  |            |                                |  |  |
|                                  | Stem Wall:  | 37 1/2"    |                                |  |  |
|                                  | SWT = Stem Wall Top   |            |                                |  |  |
|                                  | Ceiling   |            |                                |  |  |
|                                  | Roof Over This Room   |            |                                |  |  |
|                                  |   |            | 🗔 Flat Ceiling Over This Room  |  |  |
|                                  |   |            | k}<br>□ Shelf Ceiling          |  |  |
|                                  |   |            | Use Soffit Surface for Ceiling |  |  |
|                                  | Ceiling Structure:  |            | 5.1/2" Edit I/2 Default        |  |  |
|                                  |   |            |                                |  |  |
|                                  | Ceiling Finish:   |            | 5/8" Edit 🗹 Default            |  |  |

With the default flat ceiling removed from the room, navigate to Build> Roof>
Ceiling Plane from the menu:

- Click and drag along one of the walls on which the straight sides of the barrel ceiling will rest to create a ceiling baseline.
- Release the mouse button, move your cursor in the desired direction, then click to set the ridge top of the ceiling plane.
- The ceiling plane will display as a dashed, pink rectangle.
- 4. Using the **Select Objects** tool, click on the ceiling plane near one of its edges to select it, then use the edit handles to resize it to encompass the entirety of the area you would like it to span.
- 5. When the ceiling plane is appropriately sized, select it and click the **Open Object** edit button.
- 6. On the **GENERAL** panel of the **Ceiling Plane Specification** dialog that opens:

| Ceiling Plane Specifi            | ication   |          |        | × |  |
|----------------------------------|---|----------|--------|---|--|
| General                          | Height/Pitch  |          |        |   |  |
| Structure                        | Elevation Reference:  | Absolute | $\sim$ |   |  |
| Selected Line                    | Ridge Height:   | 109 1/8" | ○ Lock |   |  |
| Line Style<br>Fill Style         | Height Inside Wall:   | 109 1/8" | O Lock |   |  |
| Label                            | Bottom Height:  | 109 1/8" | ○ Lock |   |  |
| Components<br>Object Information | Pitch (in 12):  | 0"       |        |   |  |
| Schedule                         | Pitch in Degrees  |          |        |   |  |
|                                  | Heights are measured from bottom surface of rafters or trusses. |          |        |   |  |
|                                  | Measurements  |          |        |   |  |
|                                  | Structure Thickness:  | 9 1/4"   |        |   |  |
|                                  | Vertical Rafter Depth:  | 9 1/4"   |        |   |  |
|                                  | Top of Plate:   | 109 1/8" |        |   |  |
|                                  | Overhang from Wall Inside: -93 1/4"                             |          |        |   |  |
|                                  | Clip End:   | 0"       |        |   |  |
|                                  | Curved Ceiling  |          |        |   |  |
|                                  | Angle at Favor  | 45.0°    |        |   |  |
|                                  | Angle at Eave:  | 43.0     |        |   |  |
|                                  | Angle at Ridge:   | -45.0°   |        |   |  |
|                                  | Radius to Framing Bottom:                                       | 78 3/8"  |        |   |  |

- Place a check in the box beside **Curved Ceiling**, which will enable the options directly below it.
- If it's not already locked, lock the Height Inside Wall option, then set the Pitch (in 12) value to 0.
- Press the **Tab** key on your keyboard to apply this new value without closing the dialog box.
- Under the Curved Ceiling section, assign an Angle at Eave (in degrees) value between 0° and 89°. 0° would give you a flat ceiling and 89° degrees, a full 1/2 barrel. Notice that when you press the Tab key on your keyboard, the angle values update so that they are symmetrical.

If you are not sure what value to use, specify 45°. This is a good starting point, and you can make adjustments to this value at any time.

• Click the **OK** button to close the dialog.

 To see your barrel ceiling in a 3D view, select **3D> Create Perspective View> Full** Camera on drag within the room or area that contains the barrel ceiling.

| Related Articles  |
|---|
| Creating a Curved Barrel Roof (/support/article/KB-00649/creating-a-curved-barrel-      |
| Creating a Custom Arch Using a 3D/Polyline Solid (/support/article/KB-00565/creating-   |
| <u>a-custom-arch-using-a-3d-polyline-solid.html)</u>                                    |
| Creating a Custom Column Using Molding Polylines (/support/article/KB-                  |
| 02791/creating-a-custom-column-using-molding-polylines.html)                            |
| Creating a Soldier Course (/support/article/KB-00797/creating-a-soldier-course.html)    |
| Joining a Barrel Roof to a Flat Roof Plane (/support/article/KB-00684/joining-a-barrel- |
| <u>roof-to-a-flat-roof-plane.html)</u>  |

